

Integración Por Partes

Resolver las siguientes integrales aplicando la técnica de integración por partes:

1. $\int x e^x dx$
2. $\int \frac{x}{e^x} dx$
3. $\int x 2^{-x} dx$
4. $\int x \operatorname{sen}(x) dx$
5. $\int t \cos(t) dt$
6. $\int x e^{2x} dx$
7. $\int \frac{x^2}{e^{3x}} dx$
8. $\int x^2 3^x dx$
9. $\int x^2 \operatorname{sen}(x) dx$
10. $\int t^3 \operatorname{sen}(t) dt$
11. $\int \ln(x) dx$
12. $\int \arctan(x) dx$
13. $\int \arcsen(x) dx$
14. $\int 4x \ln(2x) dx$
15. $\int \sqrt{x} \ln(x) dx$
16. $\int x \arctan(x) dx$
17. $\int x \arcsen(x) dx$
18. $\int x^3 e^{x^2} dx$
19. $\int \cos^2(x) dx$
20. $\int \theta \cos(3\theta) d\theta$
21. $\int x^5 \cos(x^3) dx$
22. $\int (t^2 + 5t + 6) \cos(2t) dt$
23. $\int \sec^3(\theta) d\theta$
24. $\int e^x \operatorname{sen}(x) dx$
25. $\int \operatorname{sen}(3x) \cos(5x) dx$
26. $\int x \operatorname{sen}(x) \cos(x) dx$
27. $\int x^2 \ln(x) dx$
28. $\int \frac{\ln(x)}{\sqrt{x}} dx$
29. $\int e^{5x} \cos(2x) dx$
30. $\int \cos\left(\frac{x}{2}\right) \cos\left(\frac{x}{3}\right) dx$
31. $\int z^2 e^{3z} dz$
32. $\int t^2 e^{-t/2} dt$
33. $\int e^{at} \cos(bt) dt$
34. $\int (x^2 - 2x + 5) e^{-x} dx$

35. $\int \frac{x dx}{\sin^2(x)}$
36. $\int x \ln\left(\frac{1-x}{1+x}\right) dx$
37. $\int x^2 \arctan(x) dx$
38. $\int 5^x \sin(5x) dx$
39. $\int \ln^2(x) dx$
40. $\int e^{\sqrt{x}} dx$
41. $\int e^{ax} \sin(bx) dx$
42. $\int \ln(x\sqrt{1+x^2}) dx$
43. $\int \sin(\ln(x)) dx$
44. $\int y^3 e^{-y^2} dy$
45. $\int \frac{x \cos(x)}{\sin^2(x)} dx$
46. $\int 3^x \cos(x) dx$
47. $\int x^5 e^{x^2} dx$
48. $\int \frac{\ln^2(t)}{t^2} dt$
49. $\int \frac{\ln(\ln(x))}{x} dx$
50. $\int (x^2 - 2x + 3) \ln(x) dx$
51. $\int t^3 e^t dt$
52. $\int \sqrt{x^2 + 1} dx$
53. $\int x \tan^2(2x) dx$
54. $\int x (\arctan(x))^2 dx$
55. $\int \frac{\ln(x)}{x^3} dx$
56. $\int \frac{\arcsin(\sqrt{\theta})}{\sqrt{1-\theta}} d\theta$
57. $\int \frac{\sin^2(x)}{e^x} dx$
58. $\int \cos(x) \cos^2(3x) dx$
59. $\int x \csc^2(x) dx$
60. $\int x \tan^{-1}(x) dx$
61. $\int \cos^2(\ln(x)) dx$
62. $\int \cos(t) \ln(\sin(t)) dt$
63. $\int (\ln(x))^2 dx$
64. $\int \sin(\sqrt{x}) dx$
65. $\int x^2 \cos(3x) dx$
66. $\int x \cos^2(x) \sin(x) dx$
67. $\int \sec^5(\theta) d\theta$
68. $\int \frac{x dx}{\cos^3(x^2)}$
69. $\int \frac{x e^x}{(x+1)^2} dx$
70. $\int (\arcsin(x))^2 dx$

$$71. \int x^3 \ln(x) dx$$

$$72. \int t \operatorname{sen}(4t) dt$$

$$73. \int x^2 \operatorname{sen}(2x) dx$$

$$74. \int \sec^5(ax + b) dx$$

$$75. \int x 5^x dx$$

$$76. \int \theta \sec^2(\theta) d\theta$$

$$77. \int \sec^3(ax + b) dx$$

$$78. \int z \cos(2z) dz$$

$$79. \int x \operatorname{sen}^2(x) dx$$

$$80. \int e^{-\theta} \cos(3\theta) d\theta$$

$$81. \int x a^x dx$$

$$82. \int \frac{\ln(x)}{\sqrt{1-x}} dx$$

$$83. \int \arccos(z) dz$$

$$84. \int \operatorname{sen}(2t) \operatorname{sen}(4t) dt$$

$$85. \int \operatorname{sen}(2t) \ln(\cos^7(t)) dt$$